



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,525	03/09/2004	Holger Warth	PO-8047/LeA 35,936	1958
34947	7590	10/31/2006	EXAMINER	
LANXESS CORPORATION			RONESI, VICKEY M	
111 RIDC PARK WEST DRIVE			ART UNIT	
PITTSBURGH, PA 15275-1112			PAPER NUMBER	

1714

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

C

Office Action Summary	Application No. 10/796,525	Applicant(s) WARTH ET AL.	
	Examiner Vickey Ronesi	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/04, 3/9/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no support for amounts in percentages as recited in claim 2..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruls et al (US 5,756,576, cited on IDS dated 3/9/2004) in view of Kurasawa et al (US 2002/0040090, cited on IDS dated 8/19/2004).

Bruls et al discloses a polymer composition for use in molded articles (col. 5, lines 3-17) comprising 20-90 wt % (abstract) thermoplastic such as exemplified polyamide (col. 5, lines 35-36); 5-79 wt % (abstract) of a graft copolymer which is exemplified as ABS (col. 5, line 31) which has a backbone having a Tg of less than 0°C (col. 2, lines 44-45); 1-50 wt % (abstract) of a terpolymer which is exemplified as a terpolymer of styrene, acrylonitrile, and maleic anhydride (col. 5, lines 37-38); optionally conductive fibers (col. 5, lines 21-22); and other additives (col. 5, lines 18-24). For exemplified amounts of polymers, see the first table in col. 6.

While Bruls et al discloses the use of conductive fibers, it does not discloses the use of carbon nanofibrils in a specified amount.

Kurasawa et al discloses thermoplastic resin composition comprising 0.1-20 wt % carbon nanofibrils and teaches that hollow nanofibrils (paragraph 0056) in thermoplastic resin compositions provide not only the desirably improved conductivity but also excellent mechanical strength, heat resistance, and anti-static performance (paragraph 0102).

Given that Bruls et al is open to the use of conductive fibers and further given that hollow nanofibrils are conductive fibers which also provide for a desirable combination of conductive and mechanical, thermal, and anti-static properties, it would have been obvious to one of ordinary skill in the art to utilize carbon nanofibrils in an amount of 0.1-20 wt % in the composition of Bruls et al to obtain a conductive thermoplastic composition.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The International Search Report for PCT/EP04/001946 has been considered. The X references, EP 1 125 985, US 2002/040090, and US 2002/183435, have been fully considered, however, they have not been used in the prior art rejections of record because they do not disclose or suggest a composition comprising polyamide, graft copolymer, a terpolymer, and carbon nanofibrils.

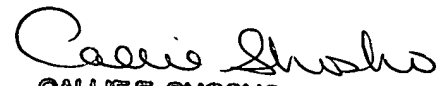
Art Unit: 1714

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/25/2006
Vickey Ronesi


CALLIE E. SHOSHO
PRIMARY EXAMINER